



# Biology Education

## About this Composite Major

Students pursuing this degree will be qualified to teach secondary science courses across the science curriculum with VCSU's Bachelor of Science in Education with a Biology major plus 12 semester hours in each of the other sciences (chemistry, earth science, and/or physics).

As a Biology Education major, you will have multiple specialized courses, including Introduction to Education (40 hours); Practicum (80 hours); Culturally Diverse Practicum (25 hours involving 3 consecutive full days in a classroom), and a twelve-week student teaching field experience. Student teaching is the culminating experience of the program and the opportunity for students to apply all they have learned regarding their classroom preparation and field experience opportunities.

## Meet a Student



*"VCSU's science department is amazing. I feel blessed to have all these fantastic teachers who come with real world experience under their belts. When I ask them a question, they are always so knowledgeable and willing to help you out. Alongside the awesome faculty, the classes take you out on outdoor experiences that help you further not only*

*your knowledge but the experience that employers are looking for." —Michaela Halvorson, Milnor, N.D.*

## Accreditations

- Council for the Accreditation of Educator Preparation (CAEP)

## Become a Biology Educator



jobs in this field require a bachelor's degree

# \$48,000

median salary of biology education degree holders

A Biology Education degree will prepare you for a career as a biology or science teacher. You'll also acquire skills to manage your classroom and teach effectively. Career opportunities with this degree can include:

- Chemistry teacher
- Biology teacher
- Education Coordinator
- Physics teacher
- Physics professor
- Lab technician

## Get Involved in your Major

The Fisheries and Wildlife Conservation Club is a local VCSU club that organizes outings and fundraisers for those interested in the outdoors. The Pre-Professional Club provides preparation for entry into graduate school and professional programs for VCSU students. In addition, there is a wide variety of activities on campus such as Choir, Band, and Intramural sports, and also Kappa Delta Pi (KDP) and Student North Dakota United (SNDU).



## Teacher Education Requirements



Students are typically admitted into Teacher Education during their sophomore year or the beginning of their junior year of college. This program requires a minimum cumulative GPA of 2.75 or higher and successful completion of the Praxis I test. Additional criteria for Admission to Teacher Education can be found at the following website: [www.onestop.vcsu.edu \(https://onestop.vcsu.edu/support/solutions/articles/10000052001-teacher-education/\)](https://onestop.vcsu.edu/support/solutions/articles/10000052001-teacher-education/).

## Practical Experience

The Rhoades Science Center includes a greenhouse, a planetarium, and laboratories for biology, chemistry, earth science, physics, computer science, and photography studies.

Students have access to: a fully equipped Aquatic Macro invertebrate Laboratory and Biomedical Research laboratory; weather stations; river gauge station; fish hatchery; the dam and reservoir at Lake Ashtabula; the Soil Conservation Service; and the North Dakota State Extension Service. Biology faculty have ongoing connections with North Dakota Department of Health, ND Parks and Recreation, Northern Prairie Wildlife Research Center, and the US Army Corps of Engineers.

## Contact Information

### Department Chair

Dr. Nicholas Galt, [nicholas.galt@vcsu.edu](mailto:nicholas.galt@vcsu.edu), (701) 845-7459

### Faculty Contact

Trista Montgomery, [trista.montgomery@vcsu.edu](mailto:trista.montgomery@vcsu.edu), (701) 845-7451

### Department Location

Rhoades Science Center 203, (701) 845-7452

## Schedule your visit today!

<http://visit.vcsu.edu/>

(701) 845-7101 or (800) 532-8641

## Plan of Study

### First Year

Fall	Credits	Spring	Credits
BIOL 150	4	BIOL 151	4
CHEM 121 (Gen Ed)	5	CHEM 116 (Gen Ed)	4
CIS 170 (Gen Ed)	3	COMM 110 (Gen Ed)	3
ENGL 110 (Gen Ed)	3	ENGL 125 (Gen Ed)	3
UNIV 150	1	Literacies (Gen Ed)	3
<b>16</b>		<b>17</b>	

### Second Year

Fall	Credits	Spring	Credits
Art and Music (Gen Ed)	3	BIOL 170	4
EDUC 250	3	BIOL 311	4
HPER 100 (Gen Ed)	2	EDUC 240	3
MATH 107 (Gen Ed)	4	EDUC 300	2
PHYS 211 or 251	4	PSYC 250	3
		Social Science (Gen Ed)	3
<b>16</b>		<b>19</b>	

### Third Year

Fall	Credits	Spring	Credits
Additional Humanities or Social Science (Gen Ed)	2	BIOL 310	4
Biology directed elective	4	BIOL 395	1
EDUC 283	3	BIOL 440	4
EDUC 351	1	EDUC 352	1
EDUC 375	2	GEOL 100	4
EDUC 450	2	EDUC 400	2
PSYC 111 (Gen Ed)	3		
<b>17</b>		<b>16</b>	

### Fourth Year

Fall	Credits	Spring	Credits
BIOL 410	4	EDUC 480	10
BIOL 490	3		
BIOL 491	2		
Biology directed elective	4		
Biology directed elective	4		
<b>17</b>		<b>10</b>	

### Total Credits 128

Please note: This plan is intended for general information only. Students are strongly encouraged to meet with their academic advisor each semester before registration.



## **Learning Outcomes**

1. Demonstrate a fundamental knowledge of the major concepts in biology.
2. Exhibit critical thinking skills by applying the scientific method to solve problems.
3. Exhibit the ability to read and communicate in a scientific style.
4. Analyze the consequences of activities on themselves and their environment.